

The Times and Register.

VOL. XXVIII. No. 4.

PHILADELPHIA, JULY 28, 1894.

WHOLE No. 829.

Original.

THERAPEUTIC EXPERIENCE WITH EUROPHEN.

BY DR. ARTHUR STRAUSS, OF BAR-
MEN.

1. GENERAL CONSIDERATIONS.

Europen is obutylodthocresotiodide) results from the action of iodine dissolved in iodide of potassium upon an alkaline watery solution of isobutylorthocresol. It is a fine yellow powder, insoluble in water, but readily soluble in alcohol, ether, chloroform, collodion, traumaticin, and oil. It is resinous to the touch and adheres better to mucous membranes, wounds and the intact skin than iodoform. It is permanent in dry air; when heated with water to a temperature of 70 degrees C. it gives off free iodine, although when in contact with moisture minute quantities of iodine are liberated even at ordinary temperatures. The therapeutic power of Europen depends upon this separation of iodine in the nascent state. It is non-poisonous and has a lighter specific gravity than iodoform, having a covering power five times greater than the latter. It has a faint aromatic saffron-like odor which nearly disappears in mixtures or solutions. A ten per cent. and even a twenty-five per cent. solution in oil gave no precipitate at the end of three months. Inasmuch as Europen is readily decomposed (separation of iodine) all mixtures which contain starch, as, for example, zinc-amylum paste, are to be avoided. On the other hand, it is indifferent to talcum. Mixtures with metallic oxides (zinc oxide mercuric oxide), and the salts of mercury are to be avoided, while simple mixtures with fats, vaseline and lanolin are durable. Mixtures with lanolin are especially to be recommended, as this substance takes up a large quantity of water and favors a continuous formation of the soluble iodine

compound. It is to the continuous separation of minute quantities of iodine that Europen owes its destructive action upon the growth of bacteria. This liberation of iodine takes place as soon as the drug is brought in contact with moisture, and also occurs within the organism if Europen is administered subcutaneously in suspension in a watery fluid, or, better still, in oily solution. Iodine poisoning cannot, however, result on account of the minute quantity of this substance given off. When properly employed in a ten per cent. solution bacteria of all kinds are arrested in their growth, although Europen has no destructive action upon bacteria. Further Europen is said to prevent the reduction capacity of bacteria having an anaerobic growth. The therapeutic utility of the remedy is chiefly based upon this property, which belongs to none of the substitutes for iodoform hitherto proposed; aside from this fact it is free from the disagreeable and toxic effects which so readily appear in the case of iodoform. (In the extensive literature of Europen the occurrence of a toxic exanthem, an urticaria, is only once noted.)

2. THERAPEUTIC EXPERIENCE IN DERMATOLOGY AND ANDROEOGY.

COMBUSTIO, CONGELATIO.

Siebel (9) successfully treated thirty cases of burns and injuries from caustics, from the first to the third degree, with Europen. He employed the remedy in the form of the powder, or the ten per cent. Europen gauze in the case of extensive surfaces and those to which insufflations could not be readily applied. The dressing was changed whenever necessary. An objectionable feature of this dressing was that the gauze frequently adhered firmly to the wound, and therefore he resorted next to a 10 per cent. ointment, which in consequence of its irritating effects, was finally replaced

by a three per cent. ointment, which gave admirable results. Under this application severe burns of the third degree healed completely after three to four weeks; the longest period of healing was 22 days. The analgesic effects of this ointment are also noted; symptoms of poisoning never occurred. Eichhoff (2) obtained a cure in 20 days after application of a one per cent. ointment. Becker (18) reports a case of severe burns (nates and left lower extremity) in a child three years old, with complete healing. The following method is recommended by Eichler (22); First application of a three to five per cent. ointment and then of a two per cent solution in oil, followed by a dressing of sterilized gauze moistened with Europhen oil fixed in position by a bandage. This dressing does not require to be frequently changed and rapidly produces healing even in cases of extensive and deep burns. Gilbert (13), Trnka (36) and Ullman (38) also praise Europhen in burns, and Trnka in frostbites.

Eczema.—In acute eczemas Europhen is contraindicated, while it effects improvement in the chronic forms (Eichhoff (2), Gottheil (26)).

Psoriasis, Favus.—In these affections Eichhoff observed no successful results, while from another source a case of psoriasis is reported in which healing took place as promptly as under the use of chrysarobin. In parasitic affections of the skin the remedy is, in general, less useful. (Eichhoff (2), Eichler (22)).

In pityriasis versicolor and herpes tonsurans (two cases) Gottheil (26) reports especially good results, while in herpes tonsurans capitis, acne and folliculitis the effect was not favorable, and in alopecia areata and lichen pilaris no better than that obtained from other remedies. Chronic parenchymatous dermatitis (seven cases) with torpid ulcers and necrotic tissues was much improved. Erysipelas is not influenced to any extent by Europhen (Eichler (22)).

In lupus exulcerans Eichhoff (2) obtained a rapid cure in two cases, while in seven others published at a later date (24) the cure was not complete. Rosenthal (39) also observed good results in this disease, and Trnka (36) derived benefit from applications of a 10 per cent. ointment after curittage in cases of tuberculosis of the skin. Europhen is warmly recommended in scrofuloderma by Eichhoff (24), as well as by

Gilbert (13), who employed it in the case of a girl 13 years old, with deep ulcerations of lymphatic origin, which had been previously treated without success by means of iodoform, balsam of Peru, nitrate of silver. After laying open the cavities Europhen was applied morning and night alternately in the form of the powder or of the 2 per cent. ointment, and every third night a cotton tampon soaked in 2 per cent. solution of carbolic acid was introduced and allowed to remain until morning. A proper diet and arsenic were also ordered. After a few weeks the ulcers became clean, graunlations sprang up and cicatrization ensued.

Eichhoff (2) and Nolda (6) have each reported two cases of ulcers of the leg in which rapid healing was obtained under the use of Europhen, while Rosenthal (39) ascribes only a slight influence to the remedy. Later Eichhoff (24) praised its action in eight other cases of this affection. Rosenthal's opinion has also been controverted by Giltert (13), who in two cases of varicose ulcers of the leg, one of which was of the size of the palm of the hand and the seat of a firm infiltration with torpid and flabby granulations, obtained a cure under the following treatment: In the evening a tepid bath containing chamomile flowers, after which the entire surface was dusted with Europhen and a dressing applied. During the day a 2 per cent. Europhen ointment was employed. Granulations soon formed, and after three weeks cicatrization had occurred.

Leprosy.—Goldschmidt reports a case cured by Europhen. The disease appeared in the form of nodular formations at the left angle of the mouth, on the left upper lip, chin, right eyelid, on the tip of the nose, and on the right upper and the left under side of the thigh. The treatment consisted in rubbing all of the leprous spots and their surroundings with a 5 per cent. oil of Europhen three times daily for five minutes. The patient continued this treatment for ten months, it being only interrupted by the birth of a healthy child. Decided improvement was noticeable at the end of four weeks. The swelling subsided, the intense redness disappeared, the mouth could be more easily and widely opened. At the end of fifteen months a complete cure was demonstrated. During the entire course

of treatment the general health was excellent. In an experience of twenty-five years Goldschmidt never witnessed so favorable results. In four other cases treated by injections of 5 per cent. Europhen oil, a recedence of the nodules was observed, but later a recurrence ensued.

Syphilis.—Eichhoff (2) at first recommended subcutaneous injections of Europhen oil (0.05-0.1 gm. daily) in constitutional syphilis. Later he discontinued their use (24) because the positive results were not commensurate with the disturbances produced. On the other hand, he highly recommends the remedy in the local treatment of syphilis. Five cases of chancre healed completely on the average in fourteen days, and the same effect was obtained in four cases of broad condylomata. Nolda (6) also recommends Europhen in chancres. Gaudin (10) concludes that in the form of subcutaneous injections it is of little service in secondary syphilis, but that when injected in the vicinity of tertiary cutaneous lesions it always exerts a beneficial action. The patients submitted willingly to the nearly painless injections. He advocates its use for ulcerations, gumata, etc., as a good local remedy (sixteen cases). Migneco (16), Shoemaker (20) and Eichler (22), have also employed Europhen locally as an ointment in tertiary syphilis with success; the best results were obtained by Gottheil (26), who secured rapid healing in three out of four cases. According to Ullman (38), Europhen always exerts a cleansing and healing effect, and for the treatment of hard gummata and syphilitic papules he advises the following procedure: At night the parts are covered with mercurial plaster, and in the morning cleansed with sublimate solution, then dusted with Europhen and covered with sterilized gauze.

Excellent results in syphilitic processes have also been observed by Oeffelein and Neuberger (37), as well as by Rosenthal (39), who successfully employed it in syphilitic ulcerations of the pharynx. Oeffelein and Neuberger noted more rapid healing after injections of 1 per cent. Europhen oil used daily or several times a week in cases of tertiary lues. The same favorable influence of these injections was also demonstrated by Gaudin (10), who injected a 5 per cent. solution in oil every

five days. From four to seven injections were found sufficient. These were at first somewhat painful, but produced no toxic reaction. Secondary syphilis, however, was not influenced by the injections.

Chancroid.—In the treatment of soft chancres, Europhen has been highly recommended as a substitute for iodoform, especially on account of its odorlessness. Rapid healing was observed after its use by Gilbert (13), Kopp (15), Migneco (16), Eichler (22), and Migneco regarded its antiseptic power as greater than that of iodoform. Nolda (6) obtained a cure in six cases; in four in from seven to nine days, in the rest in twelve to fourteen days. In a case of large chancroid, one-half of which was treated with iodoform and the other with Europhen, the latter produced more rapid healing than the former, although applied to the worse looking part. Rosenthal (39) prefers Europhen to iodoform on account of odorlessness. Richtmann (23) usually obtained a cure within two weeks. In a comparative trial of aristol and Europhen healing occurred four days earlier with the later than with the former, while with a mixture of both these substances 4 to 5, he secured a cure two days earlier than with Europhen alone. On the ground of six cases Estay (34) concludes that Europhen has as much antiseptic power as iodoform, and is a perfect substitute for the latter, and that it is preferable on account of its caustic action, due to the separation of iodine, its agreeable odor, greater lightness, non-toxic character, and greater adhesive power. Under application of the powder a cure is effected within ten days.

Its freedom from odor and irritation is praised by Oeffelein and Neuberger (37) whose experience is confirmed by Rosenthal (39). To prevent adhesion of the powder and the formation of crusts which when removed are apt to produce bleeding the latter advises that one or two drops of olive oil be dropped upon the powder. Eichhoff (24) treated 31 cases with an average period of cure of 14 days; Kopp (15) 19 cases in which the healing occurred in from 4 to 11 days. In 5 cases he employed the following procedure: After curittage under local anesthesia and arrest of hemorrhage with sublimate compresses he applied a dry dressing of Europhen, 1.0 gm., boric acid finely powdered, 3.0

gm., the crust formed being covered daily with the same powder. In 14 other cases the ulcers were cleansed with 1 per cent. sublimate solution and then covered with a mixture of Europhen and boric acid, 1.3 to 1.5 twice or thrice daily; complete healing ensued, on the average in 14 days. Ullmann (38) noted cicatrization of small ulcers within at least 10 days, of the larger sores in from 2 to 3 weeks. The application of a 5 per cent. solution of sulphate of copper to profuse suppurating or sloughing surfaces two or three times weekly aided the healing process. Recurrences, gangrene or autoinfection were never observed. Ullmann also recommends a 3 per cent. Europhen ether spray applied once daily.

Bubo Inguinalis. Two cases of bubo following chancreoid, in which the glandular abscesses after spontaneous opening and partial discharge of their contents had become converted into large chancroidal ulcers, were treated by Ullmann with a mixture of Europhen and boric acid, 1.2, after thorough curittage and disinfection. There was but a slight reaction and at the end of 16 and 20 days respectively the cavity had entirely closed. In 7 other cases of sympathetic bubo, with abscess formation, compresses medicated with Europhen-boric acid powder 1.5 were applied after incision, curittage, hemostasis and disinfection. A cure was effected in from 14 to 31 days without formation of fistulae.

In the treatment of venereal lesion Kopp (28) especially recommends Europhen as a substitute for iodoform after previous curittage. Trnka (36) observed under application of Europhen powder complete arrest of the secretions and disappearance of pointed condylomata of the vulva and cauliflower excrescences on the glans penis by a process of gradual atrophy and without operative interference, provided they were of soft character. After excision of the firmer growths the remnants rapidly shriveled and the secretion of the mucous membrane disappeared under the use of Europhen. In erosions on the penis and vulva, and especially in balanitis (40 cases), the power of Europhen of arresting secretions is emphasized by Oeffelein and Neuberger (37).

3. EUROPHEN IN GYNECOLOGY.

Richtmann (23) employed Europhen

with more or less success in diseases of the uterus. He calls attention to the fact that it has as marked analgesic effects as ichthyol, over which it has the advantage of being devoid of disagreeable odor and of not producing the burning pain in the urethra and the frequent painful desire to urinate which is so often observed under treatment with ichthyol. Europhen was employed in the form of ointments. The pains rapidly ceased, cicatrization of the erosions occurred, and at the end of 5 or 8 weeks the discharges were completely arrested. Excellent results were also observed from the application of the powder or of cotton tampons impregnated with Europhen in cases of erosions and ulcerations of the portio vaginalis, so frequently found in connection with gonorrhoea. Waugh (33) employed Europhen with admirable results in Kraurosis vulvae. On the ground of a considerable number of cases he calls attention to the value of a 6 per cent. Europhen ointment and regards the remedy as extremely useful.

4. EUROPHEN IN SURGERY.

Drs. Oeffelein and Neuberger (37) found that simple incised wounds, after suturing and application of Europhen powder healed rapidly, while even severe contused wounds going on to suppuration cicatrized promptly. A similar result was obtained from the use of the powder or a 3 to 5 per cent ointment in cases of machinery injuries with extensive loss of substance, in phlegmons of the hand, extensive whitlow after incision, and in compound fractures of the fingers. Becker (18) also recommends the remedy for cases of minor surgery. No toxic effects were noted by Vulpius (7) in 50 cases, while pains or eczema were practically absent. In wounds of the skin and soft parts, both accidental and operative, and in defects due to phlegmonous, osteomyelitic and tuberculous processes, the drug almost always exerted a favorable effect upon the healing process.

In a few days healthy granulations appeared, which in some of the cases filled up large defects with astonishing rapidity; cicatrization was most satisfactory. Richtmann (23) found Europhen an admirable substitute for iodoform in small operations, incisions, circumcision for phymosis, after opening of buboes, and was never obliged to

discontinue its use and return to iodoform. Jasinski (27) employed a dressing of Europhen powder in a case where after castration of the left testicle and extirpation of tuberculous glands the wounds which had united reopened and suppurated, and obtained healing in ten days. Iodoform, sublimate, balsam of Peru, acetate of aluminum had been previously resorted to without success. In the case of a child which one year before had been operated upon for a septic osteomyelitis and for two months suffered from an ulcer, a cure was effected in two weeks by daily insufflations of Europhen. A boy who had suffered from an acute suppurative arthritis was cured in two and one-half weeks by numerous incisions and instillation of a three per cent. solution of Europhen in glycerine. Another case is reported in which a tuberculous ostitis following an arthritis had been treated by wide incision. Persistent suppuration occurred which could not be arrested by balsam of Peru or sublimate. The employment of a three per cent. solution of Europhen in glycerine every second day effected a complete cure after eight dressings.

Oeffelein and Neuberger (37) tried Europhen in cases of fissure of the anus; Eichler (22) in urethral surgery in form of gelatine bougies. The latter recommends it also in the treatment of fistulae on account of its cicatrizing properties.

With the object of diminishing the wound secretions and of preventing the detachment and maceration of the grafts in Thiersch's method, Trnka (35) made use of dry dressings of Europhen. He regards the remedy as admirably adapted for this purpose because the resinous, extremely fine and light Europhen powder adheres firmly to the wound surfaces not covered with the grafts, thus forming a wall and protective covering for the transplanted tissues, without exerting a chemical action upon them or interfering with their vitality. The Europhen is applied with a brush so as to form a thin layer through which the grafts can be seen. Over this is placed a thin strip of gutta percha fabric anointed with white vaseline, extending about 2 cm. beyond the margins of the wound. After several strips of wicking have been inserted beneath the gutta percha for purpose of drainage, it is

firmly fixed to the skin with chloroform, and covered with a layer of cotton and an organtine bandage. The dressing should be changed no later than at the end of two days.

Trnka (36) however, employed Europhen chiefly for medicating gauze, mull, lint, which are thus converted into "adhesive dressings," which are very suitable for the arrest of bleeding. He used for this purpose an emulsion (Europhen 5.0-10.0 gm., alcohol, 100.0 gm., glycerine, 20.0 gm.), about 100.0 gm. to one metre of gauze; some Europhen powder was also rubbed in. This dressing proved serviceable, especially in severe hemorrhages of exhausted or collapsed persons, in epistaxis in children, in bleeding from the female genitals, and after operations on the rectum.

Trnka is the only author who observed a typical urticaria from the use of a ten per cent. Europhen ointment, after the third application of the dressing.

EUROPHEN IN RHINOLOGY AND LARYNGOLOGY.

In diseases which are characterized by an increase of the secretions, such as rhinitis hypersecretoria (twenty-five cases), rhinitis acuta (three cases), Europhen applied in substance has proved a very useful remedy in Petersen's (4) practice. This is confirmed by the experience of v. Szoldrski (8), who observed striking effects especially in three cases of laryngeal phthisis attended with marked muco-purulent secretion, which in one case was enormous in amount. On the other hand, in cases where there is a diminution of the secretions, that is, in rhinitis atrophica foetida fourteen cases (and also in eczema narium thirty-three cases), Petersen observed a very satisfactory stimulating effect upon the secretions from a ten per cent. ointment. Lowerstein (5) obtained excellent results in operations in the nose, in perforating ulcer of the septal cartilage, non-fetid atrophic rhinitis and in epistaxis due to erosion of the septum. In fetid processes he prefers Aristol. He also recommends Europhen in syphilitic processes in the nose. The ointment is preferable to the powder. Chapell (17) has treated fifteen cases of ozaena with insufflations of Europhen. After four months' treatment three cases were cured, while the others were much more benefitted than by other remedies. As regards manner of appli-

cation the parts were first cleansed, and then covered with Europhen by means of a powder blower. This was done every morning, while in the evening the patient was directed to use an ointment consisting of two drachms of Europhen to an ounce of vaseline, applied with a camel's hair brush. Under this treatment the secretions were increased, which were first of a mucous and later of a watery character. A case of purulent catarrh, which had been treated for eighteen months with slight success, improved rapidly. The author also praises the hemostatic and antiseptic properties of Europhen after operations in the throat and nose. Wertheimer (19) regards Europhen as having achieved an assured position in the treatment of nasal affections, especially in cases of hemorrhages due to erosions of the septum, non-fetid, atrophic processes of the nasal mucous membrane, and for local medication of syphilitic ulcers in the nose, on the lips and angles of the mouth, where Europhen appeared decidedly more effective than similar preparations, such as iodoform, iodine-glycerine, Mandl's solution, etc. He confirms Lowenstein's observations, while Petersen's statements regarding the value of Europhen powder in hypertrophic and atrophic diseases of the nose are confirmed by Eichler (22).

Although Lievin (32) observed eczema follow the application of Europhen ointments in rhinitis hypersecretoria he has learned to value the irritating effect of the remedy in dry catarrhs of the nose. In rhinitis atrophicans simplex he employs salve tampons, which are allowed to remain for twenty-five minutes, and are at once followed by a feeling of moisture and relaxation of the nose. In ozoena he also noted improvement, while after intra-nasal operations he succeeded in maintaining an aseptic condition of the wound by the use of Europhen. The same observations were made by v. Szoldrski (8), who especially calls attention to the fact that the powder is very adherent to the mucous membrane, and not easily removed by the act of coughing or by blowing the nose.

EUROPHEN IN OTOTOLOGY.

Nolda (6) noted very favorable results in purulent inflammation of the middle ear. Richtmann (23) praises the effect of Europhen in diminishing secretions in otitis media. In a case of fetid otorrhoea in which a rupture of the left

drum membrane had occurred in consequence of irrigation with strong carbolic acid solution, while on the right side there was thickening of the tympanic membrane and a muco-purulent discharge. Powell (25) observed excellent results from insufflation of Aristol-Europhen, equal parts. Under their use twice daily, the discharge had diminished and lost its fetid character at the end of eight, and after the lapse of two and one half weeks, it was completely arrested with improvement of the hearing power. In two similar cases an equally good result was secured. Lievin (32) employed Europhen in chronic suppurative inflammation of the middle ear, with remarkable success. After cleansing the ear, and drying, he introduced a ten per cent. solution in oil. Trnka (36) considers Europhen a rapidly effective remedy in profuse otorrhoea, which is arrested within a comparatively short time by insufflation of the powder, the ear being previously disinfected by an antiseptic solution. In ozena the remedy prevents, or, at any rate, retards recurrences.

EUROPHEN IN OPHTHALMOLOGY.

According to Fernandez (14) Europhen exerts a marked action in diminishing secretions in cases of conjunctivitis, Keratitis, accidental traumas and operation wounds (eight cases). Suppuration following operative procedures which could not be controlled by daily washing with boric acid, sublimate ceased after the first application of a one-half to one per cent. ointment. The author also calls attention to the cicatrizing action of the remedy after operations on the eye, even those of severity, such as enucleation.

EUROPHEN IN INTERNAL DISEASES.

Powell (25) employed rectal suppositories of Europhen-Aristol (twice daily) in chronic entero-colitis, with marked pains in the region of the transverse colon, and after three days' use observed cessation of the pain, which failed to recur. In chronic gastric and intestinal catarrh attended with pain an equally good result was obtained from this treatment within ten days. In a case of chronic constipation the suppositories relieved the intense feeling of soreness in the transverse and descending colon while the discharges of shreds of membrane, mucous and blood, with the stools, were

greatly lessened. Powell regards Europhen and Aristol as specifics in abnormal discharges, superior to iodoform, and as hemostatics par excellence, especially in epistaxis.

9. ACTION OF EUROPHEN ON THE TUBERCLE BACILLI.

This action has been investigated by Christmann (30) on pure cultures of the tubercle bacilli in the following manner: 1. Europhen was dusted directly upon the culture; 2. It was placed in a short tube which was suspended in the hermetically closed culture tube; 3. It was employed in the form of a concentrated solution in olive oil, about 25 per cent. As the result of intra-peritoneal inoculations of guinea pigs, it was demonstrated that Europhen exerts a powerful bactericidal effect in all cases where the conditions are favorable for its decomposition, that is, the separation of iodine. This occurs not only when the drug is brought in direct contact with an aqueous culture medium, but also when it is exposed to an atmosphere saturated with moisture, and not in direct contact with the culture. When dissolved in olive oil, it remains ineffective even after twenty-five days' action on the culture: when dusted on the latter it does not positively cause death of the bacilli in fourteen days, but usually in twenty-one days, and in the form of vapor in twenty-seven days, while in the latter case it markedly diminishes their virulence in thirteen days.

FORMULAE RECOMMENDED IN PRECEDING ARTICLES.

R	Europhen	grams.
	Ol. Olivar	25
Ds.:	zu Injectionen.	
R.	Europhen.	grams.
	Solut in Ol. Olivar.	35
	Vaselline.	30
Ds.:	Brandsalbe.	15
R	Europhen.	gram.
	Solut in Ol. Olivar.	5
	Vaselline.	20
	Lanolin.	15
Mf.	ungt. für torpide Geschwüre.	
R	Europhen.	gram.
	Ol. Amygdal gutt. Nonnell Ol.	105
	Cacao.	2
Mf.	globul. vaginal. No. 1.	5
R.	Europhen.	gram.
	Aristol.	5
Ds.:	Zum Bepudern.	4

R	Europhen.	gram.
	Acid Boric Pulv.	1
Ds.:	Zum Aufstreuen.	3
R	Europhen.	gram.
	Vaselin flav.	105
Ds.:	Augensalbe.	10
R	Europhen.	gram.
	Alkohol.	3
	Glycerine quant. sat. ad.	80
Ds.:	Zur Imprägnirung "Klebender" Verbandstoffe.	100
R	Europhen.	gram.
D.:	Trockenantisepticum.	5

LITERATUR.

1. Siebel, Therapeutische Monatshefte, July 1891.
2. Bichoff, Therapeutische Monatshefte, July 1891.
3. Goldmann, Pharmaceutische Zeitung, July 1891.
4. Petersen, Münchener Medizin, Wochenschrift, No. 30, 1891.
5. Lowenstein, Therapeutische Monatshefte, September 1891.
6. Nolda, Therapeutische Monatshefte, October 1891.
7. Vulpius, Deutsch Medicinische Wochenschrift No. 44, 1891.
8. V. Szoldraki, Münchener Medizin, Wochenschrift, No. 43, 1891.
9. Siebel, Berliner Klinische Wochenschrift, No. 8, 1892.
10. Gaudin, Journal des Maladies Cutanees and Syphilitiques, No. 1, 1892.
11. Petersen, Wratsh, No. 2, 1892.
12. Rosenthal, Berliner Klinische Wochenschrift, No. 11, 1892.
13. Gilbert, Balneologische Centralblatt, II Jahrgang No. 13.
14. Fernandez, Revue Gener. D'ophtalmol, April 1892 and Archives of Ophthalmology, New York.
15. Kopp, Münchener Medicinische Wochenschrift, No. 17, 1892.
16. Migneco, Gazzetta Degli Ospitali, No. 1, 1892.
17. Chapell, Medical Record, April 1892.
18. Becker, New York Med. Journal No. 23, 1892.
19. Schech, Fourth Edition, reviewed by Wertheimber.
20. Shoemaker, Jour. of Amer. Med. Assoc., 1892.
21. Giles, New York Med. Journal, June 1892.
22. Biehler, Deutsche Medicinal-Zeitung, No. 99, 1892.
23. Richtman, Aertztlicher Central-Anzeiger, No. 23, 1893.
24. Eichhoff, Therapeutische Monatshefte, January 1893.
25. Powell, The Medical World, December 1892.
26. Gotthell, Med. Record, December 1892.
27. Jasinsky, Gazetta Lekarska, No. 9, 1893.
28. Kopp, Therapeutische Monatshefte, April 1893.
29. Goldschmidt, Therapeutische Monatshefte, April 1893.
30. Christman, Centralblatt f. Bakteriologie und Parasitenkunde, No. 15, 1893.
31. Strauss, Monatshefte für Pract. Dermatol., XVI, 1893.
32. Lievin, Deutsche Medizin, Wochenschrift, No. 16, 1893.
33. Waugh, Times and Register, July 1, 1893.
34. Estay, These Paris, 1893.
35. Trnka, Wiener Medizin. Wochenschrift, No. 18, 1893.
36. Trnka, Wiener Medizin. Wochenschrift, No. 32, 1893.
37. Oefflein und Neuburger, Monatshefte für Praktische Dermatolog. XVII, 1893.
38. Ullmann, Intern. Klinische Rundschau, No. 3, 1894.
39. Rosenthal, Monatshefte f. prakt. Dermatol., June, 1894.

The Times and Register.

A Weekly Journal of Medicine and Surgery.

Subscription Price, - - \$1.00 Per Year.

FRANK S. PARSONS, M. D.,

EDITOR AND MANAGER.

EDITORIAL STAFF.

W. H. PANCOAST, M. D., Philadelphia, Pa.
T. H. MANLEY, M. D., New York, N. Y.
E. W. BING, M. D., Chester, Pa.
S. H. MONELL, M. D., New York, N. Y.
J. R. CLAUSEN, A. M., M. D., Philadelphia, Pa.
AD. MEYER, M. D., Chicago, Ill.
LOUIS LEWIS, M. R. C. S., (Eng.) Philadelphia, Pa.
J. A. TENNEY, M. D., Boston, Mass.
E. B. SANGREK, A. M., M. D., Philadelphia, Pa.

PUBLISHED BY

THE MEDICAL PUBLISHING CO.

Communications are invited from all parts of the world. Original articles are only accepted when sent solely to this Journal. Abstracts, clinical lectures, or memoranda, prescriptions, news and items of interest to the medical profession are earnestly solicited.

Address all communications to

1725 Arch Street.

PHILADELPHIA, JULY 28, 1894.

SAMUEL S. THORNE, PRESIDENT OF THE NATIONAL ASSO- CIATION OF RAILWAY SURGEONS.

We are pleased to be permitted the privilege of presenting to our readers the portrait of the president of the National Association of Railway Surgeons for the ensuing year.

Dr. Thorne is one of the best-known and most highly respected surgeons in the great and growing West. He has occupied about all the big positions of honor and distinction in the gift of his profession of Ohio and Toledo, where he has faithfully labored for more than 30 years.

With keen foresight and a quick realization of the new demands which our prodigious railway system has imposed on the profession, he, conjointly with a half-dozen well-known surgeons of the West and Southwest, organized that immense association of which he is the honored head.

The present thrifty, prosperous state of the National Association and the

large number of State Railway Associations, attest to the wisdom and good judgment of that little band of pioneers brought together by Mr. Thorne.

No other organization of surgeons ever called into existence, for its early age, has accomplished the work of the National Association of Railway Surgeons. Its past record has been a pride to every member. Recently its harmony was marred by some unfortunate political bickering, but with the firm, sincere and fearless Thorne at the helm, petulant disturbers will be ruthlessly cast aside, and we will look in the future for more and better work than in the past.

Dr. Thorne's opportunities are great and his responsibilities are many; therefore, with well sustained support and assistance, we will look during the coming year for the greatest success the National Association has ever enjoyed.

THE SIGNIFICANCE OF ANURIA AFTER SURGICAL OP- ERATIONS.

We not infrequently hear it said that the case would have done superbly after operation "had not suppression of the urine" set in and cut off life.

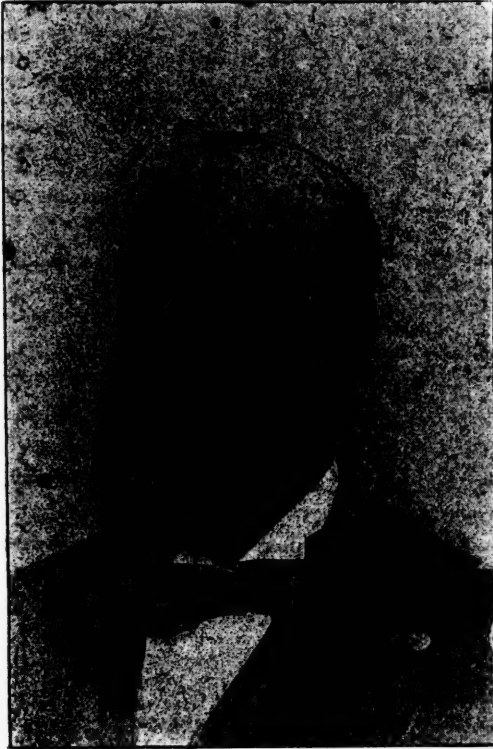
This assumption in the vast majority of cases rests on a fallacious foundation, without a shadow of proof to sustain it. Cause is confounded with effect. A capital operation has been performed, a limb has been amputated or a serous cavity opened.

Profound mental shock follows, or acute surgical fever succeeds, the heart's action is tumultuous, the pulse becomes thready and excretion of the urine ceases. This latter phenomenon is always one of serious omen, under these circumstances; not because it implies that any pathological changes whatever have seized on the secreting elements of the kidney, but that peripheral death has commenced. The blood-current steadily diminishes in volume, the secretory glands cease to act through want of circulatory supply.

We will observe for some time before the end comes that the lachrymal glands are deficient in action, so that the orbital conjunctiva and cornea become dry and hazy, the tip of the tongue is cool and the mouth dry.

No! suppression of the urine is rarely if ever per se a post-operative cause of death. It is simply an evidence of vascular stasis, following on a sinking of the vital powers, a consequence, and nothing more.

This term, together with the more modern meaningless makeshift, "heart failure," should go in the same category, for they both serve as an excuse and cloak for ignorance, and nothing more.



SAMUEL S. THORNE, M. D.

Surgery.

Under the charge of T. H. MANLEY, M. D., 302 W. 53d St., New York.

THE GONOCOCCUS OF NEISSER, IN
THE SANITARY SERVICE OF
LYONS. * * * * A
STUDY OF BLENOR-
RHAGIA IN THE
FEMALE.

By Dr. Carry.

This contribution is one of high importance, for the reason that it deals with a subject which has come recently to occupy an important position in the etiology of female pelvic diseases.

The author begins by affirming that in many of the most virulent infections of gonorrhea the symptoms are practically nil, while, on the contrary, when a purulent discharge is abundant, the pyogenic microbe is not of an infectious origin. Therefore, the importance of a microscopical examination in all suspected cases.

The gonococcus is most frequently found in the meatus urinarius and the cervix uteri, but rarely in the vagina.

Loser had frequently found the gonococcus when the part infected had no symptoms whatever.

M. Carry declares that in any given case an accurate diagnosis may be made by simple, effective and rapid means.

The different methods of examination are detailed and finally his own is described, which occupies but two minutes. He expresses a few drops of matter from the gland of Bartholin, desiccates and stains his specimen, and in a moment or two is ready to use the lens.

He prefers an aqueous solution of methylene-violet of Merck's.

The full particulars of detail in bacteriological examination is set forth. Indeed, he freely declares that the reason why negative tests are made is because of the difficulty or carelessness in making use of the microscope.

On the question of contagion, he says it is important to know how a man may acquire the disease, and how he communicates it.

With him, he alleges, the urethra, rather than the peri-urethral follicles is the primitive seat. After the acute

stages pass off, then one may copulate without pain, but with a certainty of communicating the disease. Under the influence of an erection the urethral secretion is formed abundantly and makes its way to the meatus.

This in gonorrhea is invariable infected. Now, if the glans penis is carried far up the vagina to the cervix, infection is most certain; while if emission takes place near the vaginal outlet, the danger of transmission is greatly diminished. Especially is this true when an immediately vaginal lavage is made. The cervix being the site at which the cocci most abundantly abound, if the male ejaculate in close contact with this, the danger of infection from the woman is great.

—Archives De Tocologie et De Gynecologia, June, '04.

CENTRAL ANUS CONSECUTIVE TO GANGRENOUS HERNIA.

By M. Chaput.

Mondret has recently presented an interesting "resume" on this unusual disease.

A woman, 50 years old, had a crural hernia for eight years, on the right side, which became strangulated. The tissues broke down and an artificial anus followed.

After some months, the edges of the intestine were united; but after twenty days, union gave way, and fecal leakages succeeded as badly as before.

A second attempt to close the bowel met with no better success.

For a long time a tampon was worn, to hold back fecal matter, but of late the gases and liquid elements escaped, and were a source of great distress to the unfortunate patient.

Now, Mondret, as a preliminary to operation, for several days fed the patient on nothing, except milk; in the meantime keeping the parts washed with a boracic acid solution. For some time one gramme of naphthol was taken daily.

Operation was made under cocaine

anesthesia—1 to 100 per hypodermic injection and 1 to 20 for direct application.

After a circular incision around the orifice of the fistula, the skin and other structures were deflected back one and one-half centimetres. Now, the borders of the intestines were partly vivified, when the mucous and cellular coats were closed with fine silk suture. Next, the muscular and serous coats were closed with the same material. The peach was now closed with drainage and dressing applied.

For the first day nothing but small doses of opium were given; from the second day an alimentation of milk followed, on the sixth day a dose of calomel was taken and an enema given. On this day the superficial sutures were removed. Union was finally secured, though it was necessary to use caustics lightly in the end. A complete cure followed.

—Revue de Therapeutique, Medico-chirurg. Juillet, '94.

ROREX. ON TREATMENT OF FRACTURES BY THE AID OF THE SUTURE.

This surgeon reports two cases of fracture of the clavicle, with immediate suture. The success was so excellent, he says, that in each one month after no trace of deformity could be detected at the site of injury. He advises it particularly in all those cases in which there is a tendency to vicious union.

Two other cases of fracture of the femur were mentioned, though the results were not satisfactory. Hennequin's apparatus is regarded as most useful.

A case of serious fracture of the leg is also included in which, he says, the results were very gratifying.

—Revue de Therapeutique Medico-Chirurg. Juillet, '94.

Note by translator—The wire suture is undoubtedly a valuable adjunct in certain types of serous compound fracture, but its range of application is very limited, and must be regarded as an unwarranted procedure in all simple fractures, if we except the patella.

T. H. M.

NECROSIS OF THE LABYRINTH AND DEEP MASTOID SUPPURATION.

M. Lannois discusses in extenso and presents many cases illustrative of neglected ear lesions in children.

He points out, with singular precision and detail, to the pathological changes and symptomatology of suppurative middle-ear disease, showing how it may lead to impaired hearing, total deafness or facial paralysis.

He is no less emphatic on the importance of early and radical measures in suppuration of the mastoid-antrum, by laying freely open the pus focus and clearing away all infected tissue.

—Revue Laryngologique, D'Otologie et Rhinologie, Juillet, '90.

ON THE EMPLOYMENT OF GLYCERINE IN HEPATIC COLIC.

M. Feiraud has lately reported at length his experience in the treatment of hepatic colic by glycerine. He summarizes as follows:

(1.) Glycerine introduced by the stomach is taken up by the circulation unchanged, and so we will find it in abundance in the hepatic veins.

(2.) It is chologogue of great power and of vast potency in bilious-colic.

(3.) A large dose (from 20 to 30 grammes) is needed in colic.

(4.) A small dose (from 5 to 15 grammes taken in some alkaline water, taken from time to time, will prevent recurrent attacks.

(5.) Glycerine without being a lithotriptic is the medicament par excellence in biliary lithiasis.

—L'Union-Medicale, Juillet, '94.

LARORGENNE ON UNION OF ABDOMINAL INCISION AFTER LAPAROTOMY.

This author, with a view of obviating the tendency to eventration after laparotomy, recommends that immediately after operation there should be inserted two deep metallic sutures, including all the layers. These are left in place, with gauze interposed, to keep the wound open, till all suppuration has ceased. As the discharges discontinue the gauze is gradually removed and the sutures brought singly into position. This plan, it seems, has been effective in securing solid union and diminishing the tendency to hernia.

—Gazette De Gynecologie, Juillet, '94.

Medicine.

Under the charge of E. W. BING, M. D., Chester, Pa.

EXOPTHALMIC GOITRE.

This is characterized by three essential symptoms, goitre, palpitation and exophthalmos, which constitute the symptomatic "tripod."

The beginnings are slow but progressive. The person complains first of strong palpitations and then goitre shows itself, with exophthalmos. If, however, sometimes begins abruptly, as when caused by a fright or over-strain of the muscular and circulating systems. The pulse in this disease reaches sometimes 140 to 160 beats; physical signs are generally wanting, as regards the heart. The arteries of the neck are dilated, and give a murmur.

The normal pulse while accelerated is very feeble. The lowered pressure and the peripheral vessels contracts with the elevated pressure on the central parts of the system, a phenomenon analogous to that seen in essential tachycardia. Enlargement of the thyroid gland occurs generally slowly; it is the seat of alternate congestions and remissions.

The whole of the gland is usually affected. If only a part it is frequently the right lobe. The superficial veins become prominent; the gland, as also the entire neck, seems to be shaken by the pulsations; sometimes a sort of thrill may be felt, with an expansion following each cardiac contraction.

Compression of the trachea and the recurrent nerve sometimes occurs when the enlargement is great.

The exophthalmos is the next symptom in the category; generally symmetrical, but sometimes more marked in one eye than in the other. It is sometimes slight and sometimes extreme, the eyes being too prominent for the lids to cover them, thus rendering them liable to inflammations from the deposits of dust.

Exophthalmic goitre is frequently associated with hysteria, neuralgia, disorders of the mind, &c. Digestive disorders, sexual disorders, as amenorrhea or dysmenorrhea.

Pregnancy exerts a bad effect over exophthalmic goitre.

—Annales de Med.—E. W. B.

TUBERCULAR ULCERATION OF THE GUMS.

A case is reported in *Prog. Med.* in which ulcerations of this character destroyed more than half of the height of the inferior maxillary, causing the teeth to fall out.

This is somewhat rare, since tubercular ulcerations affecting the gums are usually superficial.

CARBOLATE OF MERCURY.

The carbonate of mercury is said to be a good remedy, since it is more antiseptic than carbolic acid and less poisonous than the other salts of mercury.

TONGUE-TIE.

Chervin has made studies on the subject of cutting the fraenum for tongue-tie, and finds that outside of cases where the shortness of the fraenum prevents the child from nursing, the operation is useless, as far as improving speech is concerned.

—*Prog. Med.*

The autopsy on President Carnot revealed that the wound was situated immediately below the false ribs on the right side, three centimetres from the xiphoid cartilage. It measured 20 to 25 mm., and the knife had cut completely through the corresponding costal cartilage. The dagger penetrated the left lobe of the liver, about 5 or 6 millimetres from the suspensory ligament. It passed from left to right, and from above downwards, wounding the portal vein in two places; the tract of the wound in the interior of the liver measured 11 to 12 centimetres.

—*Annals de Medicine.*

ARTIFICIAL RESPIRATION BY INSUFFLATION IN CASES OF ASPHYXIA.

Laborde says that in a number of cases of grippe, asphyxia, due less to the pulmonary lesions than to the infection

of the blood itself, constitutes the cause of death. The mechanism is the same as seen in poisoning caused by carbonic acid gas, curara, strychnia or tetanus.

The proper proceeding is to perform insufflation by the bellows, as used in experimental physiology.

Laborde has invented a plan by which this can be done without requiring previous tracheotomy. Inhalations of oxygen, rhythmic tractions of the tongue, while serviceable, have not the powerful action obtained from automatic machinery adapted to carrying on insufflations (of various gases).

Carpenter introduces a new method of ligating blood vessels, similar to the usual method of ligating, by a double ligature, the pedicle of a tumor. Success is absolute.

—Prog. Med., E. W. B.

TREATMENT OF LEAD POISONING BY THE MONO-SULPHATE OF SODA.

After many experiments on animals Peyron has discovered that mono-sulphate is a good remedy for saturnism.

He gives the drug in doses of 30 to 40 c.gms. per day, either in solution with glycerine or in pill form. The liquid preparation is preferable.

The eliminative properties of the compound are superior to those of iodide of potassium. The elimination may be gauged by analysis of the urine.

He has shown that the black coloration of the stools gives way in a few days to the normal color, and attributes this to elimination by the bowel.

The administration is easy, and the salt has the advantage of increasing the appetite. The colic is quickly banished. Recent palsy is rapidly cured. Besides these advantages it is useful in a diagnostic way in doubtful cases, since the urine shows bad traces almost at once. He, Peyron, advises that purgatives should be used in addition—where there is colic—and in the paralysis electricity is advantageous.

—Progr. Med., E. W. B.

SYPHILITIC ONYCHIA.

Specific medication by potass iod. and mercury.

Cleanse the wound thoroughly and dust with

	Grams.
R Calomel (grains 15)	1
Lard (ounces 1)	30
Or with strips of plaster de Vigo.	
—Annales de Med—E. W. B.	

TREATMENT OF OZENA.

Range has adopted very thorough irrigation of the parts as a means of cure.

The principle consists in the abundant quantity of liquid employed at each sitting. Instead of the 3 or 4 litres usually recommended, he uses from 20 to 50 litres. The practice of these large effusions is much easier than it appears to be. Range declares that there is no danger to the middle ear, and says that he has never seen an unfavorable symptom arise from this method.

—Revue Medicale.

Bacteriological experiments have been made with dust collected from railway cars. Samples were inoculated on a number of animals. Part of them rapidly died from different contagious diseases; the others succumbed after a variable time. Three of the last who had been inoculated with dust taken from the walls and cushions of the carriages showed signs of tuberculosis.

—Revue Medicale.

THE BLOOD IN PULMONARY STENOSIS.

Banholzer describes the results of the examination of the blood in a deaf mute aged 10 years, with congenital pulmonary stenosis. There was marked cyanosis, and the finger ends showed great clubbing. The hæmoglobin stood at 160 per cent., the number of red cells at 9,447,000 against 5,000,000. The alkalinity was 0.028 as against 0.25 to 0.35, and the specific gravity 1071.8 instead of 1035-1068. Reduced hæmoglobin was present as well as oxy-hæmoglobin. The N-estimation corresponded to 3.7 per cent. of the fluid blood, and 13.15 per cent. of the dried blood. There was no change in the morphological elements. The examination thus showed a striking concentration of the blood. The author refers to two recorded cases in which the same observation was made. The marked cyanosis is in all probability due not to stagnation, but to this concentration of the blood.

—Centralbl. f. Inn. Med., June 9, 1894.

Therapeutics.

Under the charge of LOUIS LEWIS, M. R. C. S., Philadelphia.

DIPHTHERIA ANTITOXIN.

I take great pleasure in placing at your disposal the results obtained by me with injections of Diphtheria Antitoxin-Schering.

Twelve children out of 64 at the Girl's Protectory (Madchenhort) had been stricken by the disease in a severe form; two of them died; all the others were treated with the Antitoxin-Schering, after which the institution was closed.

On opening the "Madchenhort" a week later I was happy to note that no new cases developed and even to-day, after six weeks, all are well, although the most direct intercourse had existed, and I can likewise state the same fortunate result from Antitoxin injections in cases of brothers and sisters of children suffering from diphtheria. I further inoculated 30 children in nine families where diphtheria had broken out, not one of whom was attacked by the disease.

In six families, where I was called at an early stage of the disease—yet undeveloped, but undoubtedly diphtheritic in character—I injected the Antitoxin in all the children, sick and well alike, with the result, that, although the membranes developed in the sick children, a very much milder form and shorter duration of the disease was obtained; the destruction of the ophleixie-plaques being simply a marvelous one.

In an experience of 25 years, during which I have treated several thousand cases of diphtheria, I have never seen the disease assume such a mild form as after the injection of your Antitoxin.

Faternally yours,

(Signed)

O. SCHULER.

To Dr. Hans Aronson, Berlin, Germany.

"IODOFORM-BOVININE."

To the novel disclosures of anesthetic power (so called) in the blood treatment, and probable discovery thereby of the true theory of pain from tissue waste, is now to be added a combination of a third beneficent factor with the former two—thorough antisepsis in the vital nutrient and anesthetic. The following case shows how this new dis-

covery will obviate in multitudes of cases the necessity for painful curetting, for daily redressing, and for continued waste of tissue and strength in pus.

Louis S— (German, barkeeper, 30 years old, married) came under the care of Dr. Biggs at the surgical clinic of the Demilt Dispensary, New York, on the 10th of April, 1894, in a very bad way and suffering severely, with a large sinus leading down to the scapula on the left side, very painful, and emitting an offensive sanguineous mucopurulent discharge. He had received a blow on the part, six months before, which was followed by the formation of an abscess as large as a goose egg. This had been treated by the family physician, incised, cleaned out, and packed with iodoform gauze. The wound seemed to be doing well for some ten days, but then grew worse and became more distressing than ever. He was told that the bone had become diseased, and that an operation was necessary. Refusing this, he resorted to another physician, who treated the wound with injections of iodoform and glycerine in the cavity, but still the case grew steadily worse. At length he was persuaded to seek surgical treatment at one of the hospitals. An operation was performed on the 8th of March. After remaining in the hospital until March 18 he left, with the wound improved, but still open, and requiring to be presented for redressing three times a week. Neglecting this, he soon got worse than ever, and when greatly run down in strength and flesh, at last found his way to the Demilt on the 10th of April, as before stated. The scapula was now found to be denuded of periosteum and partially necrosed, for a space two and a half inches in diameter. After a course of preparatory treatment, on April 16 an incision was made through the trapezius muscle down to the scapula, the sinus and the necrosed surface of bone thoroughly curetted, and the cavity packed with sterilized gauze saturated with the novel preparation, iodoform-bovine (above referred to), compounded by the following formula: Iodoform, 40 gr.; castor oil, 2 dr.; mucilage acacia, 2 dr.; bovine, 2 oz.

It is worthy of remark, in addition to the continuous antiseptics supplied by this compound dressing, with its marvelous anesthetic and vitalizing powers, that the obnoxious odor of iodoform is strangely transmuted by the combination into one decidedly agreeable! It may also soothe slightly our ethico-hysterical friends to be assured that this "nostrum" is of strictly professional origin and not patented.

The present case, as we have seen, was too bad to admit of dispensing with the curette, but the after process crowned the three-fold preparation—vital-antiseptic-anesthetic—with splendid success. The usual dressings were applied, and repeated the next day, with the iodoform-bovine as before, and then left undisturbed for three days; the condition of the patient at once becoming most favorable, and the distressing pain having immediately ceased, as usual, under the blood treatment, without any anesthetic proper; bovine having no tendency to deaden the nerves of sensation, so that, strictly speaking, "anesthetic" is only a convenient misnomer. At the end of these first four days the bone was already becoming covered with new periosteum, and of a healthy pinkish hue. After packing and dressing as before, it was left again for three days, when the bone was found completely clothed with periosteum except a spot half an inch in diameter, the wound healthy, without a particle of pus, and the patient doing nicely. Again packed and dressed, and left four days; after which the periosteum was found perfected, and the wound clean and in a condition of promising improvement. The next treatment was given after three days more, when the cavity was found to be already half filled with clean and healthy granulations. This was the fourteenth day; after which the treatment was continued twice a week until May 5, when the sore was completely healed, with a soft pink cicatrix, and the patient was discharged.

—Sanitary Era.

CONGENITAL RICKETS NOT "FOETAL RICKETS."

Herzfeld describes a female infant born of a single woman, aged 28. Labor was spontaneous, and the mother had none of the symptoms of rickets. On the other hand, the infant had all the signs

of the common rickets, the true rachitis of children and adults. There was cranio-tabes, also softness of the cranial bones near the sutures and fontanelles, beaded ribs, and shortened, curved bones in the extremities. The left humerus was fractured in the middle of its shaft. There was a greenstick fracture of the right femur. Separation of the epiphyses was detected in both femora. Both feet were deformed by talipes equino-varus. The fractures were explained by the small quantity of liquor amnii in the uterus coinciding with the natural brittleness of the diseased bones. During the first ten days there was infiltration, apparently of blood, around the fractured humerus and femur. The temperature exceeded 104 degrees. The infant was sickly, and not expected to live. Herzfeld dwells on the difference between this case of true rickets developed before birth and the so-called "foetal rickets" of Kaufmann and Paltauf, which is a marked defect in development, with other signs of cretinism—deformed cranium, oedema in thoracic and abdominal cavities, and myxomatous changes in certain organs. This disease is hardly rickets, "osteogenesis imperfecta" of Stilling, but a distinct disease, to which Herzfeld proposes to apply the name "chondrodystrophia foetalis."

—Centralbl. f. Gynak, No. 18, 1894.

CRANBERRY JUICE IN CHOLERA.

G. I. Goriansky has found that juice expressed from raw cranberries (*fructus oxycocci palustris*), and given freely, pure or diluted with an equal part of water, is an excellent means of relieving thirst and vomiting in Asiatic cholera. The patients take the acid and somewhat astringent beverage most readily. As the author's observations in fifty cases have shown in a number of patients in whom ice and narcotics fail to make the slightest impression on sickness, the subsequent administration of cranberry juice in small but frequently repeated doses rapidly checks both vomiting and nausea. The author lays stress on the fact that the harmless juice has a powerful destructive action on the cholera vibrio, being, in fact, much superior in this respect to lime water, carbolic lime water, birch tar, Raptchevsky's pixol, and a 5 per cent. solution of carbolic acid.

—Vratch, No. 6, 1894.

Notes by the Wayside

BY ERNEST B. SANGREE, A. M., M. D.,
PHILADELPHIA.

The most complete reductio ad absurdum with regard to the high dilutions advocated by Hahnemann and his disciples was contained in a clever article that I lately saw from the pen of a German scientific man. Physicists generally accepted the size of a molecule to be about thirty-two billionths of an inch in diameter.

Assuming this conclusion the author proceeds to make the twenty-fourth dilution by the decimal process, adding one drop of medicine to nine drops of water, one drop of this mixture to nine fresh drops of water, and so on, up to the twenty-fourth dilution. He now shows mathematically that the last ten drops contain but 1-1,000,000,000,000,000,000,000,000 (one-octillionth), of a drop of the original medicine, or only one molecule of all those that the drop at first contained.

Carrying the dilutions higher is now physically impossible, for of course the molecule cannot be further divided and still be the original substance.

It follows, therefore, that in the twenty-fifth dilution there is just one chance in ten of getting the medicine molecule in a drop of the so-called attenuation; the twenty-sixth dilution allows but one chance in one hundred, and the thirtieth dilution would give the patient but one chance in one million of getting in his drop dose the one molecule left at the twenty-fourth attenuation. Yet the homoeopaths claim that the high potencies merely begin at the thirtieth dilution and run them up even to the thousandth!

The results would be just the same whether one drop were taken to experiment with or a larger amount were used. At the thirtieth dilution there would be one molecule of the medicine to 100 gallons of the attenuated liquid, and the reader can readily imagine the patient's chances, taking a teaspoonful every hour or two, of getting hold of that solitary molecule. Nearly every drugstore, I notice, is supplied with a full list of "Dr. Humbug's specifics," or at least it sounds something like that.

With each sale a little book is given, containing directions for the diagnosis and speedy cure of almost every disease in the calendar. I suppose that these medicines are mostly harmless, and if parents insist on drugging their children this may be as easy a way as any for the youngsters, but surely the proprietor ought not to be permitted to advertise these nostrums as sure cures for croup, diphtheria and similar frightful diseases. Untold harm must sometimes be produced by ignorant parents relying on these miserable "specifics" until all chance of a cure is past.

Prescriptions.

FOR OBSTINATE THRUSH IN CHILDREN.

R—Zinci chloridi, gr. 2.....	Grams.	
Aquae, oz. 6.....		12
Solve.		
To be applied locally.		

FOR THE VOMITING OF PREGNANCY.

R—Menthol, gr. xl.....	Grams.	
Olei amygdalae, dr. 3.....		2 5
Solve.		
Six to ten drops on a lump of sugar.		

FOR ALOPECIA AREATA.

R—Aceti cantharidis, dr. 1.....	Grams.	
Unguenti hydrargyri oxidi rubri (1 oz.).....		4
Misce et fiat unguentum.		30
To be applied to the affected parts twice daily.		

A PIGMENT FOR WARTS.

R—Acidi salicylici (15 gr.).....	Grams.	
Acidi lactici (15 m.).....		1
Collodii flexilis ad (2 dr.).....		8
Misce et fiat pigmentum.		
To be applied morning and evening.		

A COOLING LOTION FOR PRURITUS.

R—Liquoris ammonii acetatis (2 oz.).....	Grams.	
Acidi hydrocyanici diluti (1 dr.).....		60
Spiritus rectificati (3 dr.).....		12
Aquae rosae ad (8 oz.).....		250
To be applied locally.		

FOR LICHEN.

R—Cretae prepar. (6 dr.).....	Grams.	
Sulph. sublim.....		25
Olei cadini, aa. (9 dr.).....		35
Saponis nigr.....		100
Adipis aa. (25 dr.).....		100
Melt the lard at a gentle heat. Then add the black soap and other ingredients, stirring until cold.		
Sig.—Apply locally.		

Hebra.